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10/045,996	10/18/2001	Dorothen Kuettner	10011035	1545
7590 03/18/2008 HEWLETT-PACKARD COMPANY Intellectual Property Administration P.O. Box 272400 Fort Collins, CO 80527-2400				
EXAMINER BOYCE, ANDRE D				
ART UNIT 3623		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/045,996

Applicant(s)

KUETTNER ET AL.

Examiner

Andre Boyce

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Final office action is in response to Applicant's amendment filed December 19, 2007. Claims 1, 8 and 15 have been amended. Claims 1-20 are pending.
2. Applicant's arguments filed December 19, 2007 have been fully considered but they are not persuasive, and any new rejections have been necessitated by Applicant's amendments to the claims.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 is rendered vague and indefinite. The claim language recites "an inventory table for terminal demand nodes and internal demand nodes of the internal demand nodes," thus including "internal demand nodes" twice in the claim language. The Examiner will interpret the claim as including the nodes in a demand table, as recited in independent claims 1 and 8.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adler (US 2002/0169658), in view of Lindell (USPN 6,622,056), in further view of Starr et al (USPN 6,947,905).

As per claim 1, Adler discloses a system for supply chain alternative scenario analysis (i.e., strategy model and analysis tool, including a spreadsheet application that apply predefined macros, ¶ 0033) comprising a computer system, said computer system further comprising: a) a spreadsheet application having a macro programming capability (i.e., strategy model and analysis tool, including a spreadsheet application that apply predefined macros, ¶ 0033); b) a supply chain model builder (i.e., strategy model and analysis tool, including a spreadsheet application that apply predefined macros, ¶ 0033); c) a supply chain model automatically generated by said supply chain model builder using input from said spreadsheet application, wherein said supply chain model has desired capabilities (i.e., strategy model and analysis tool, including a spreadsheet application that apply predefined macros, ¶ 0033); and d) at least one supply chain scenario (plurality of scenarios 12, ¶ 0073).

Adler does not explicitly disclose an internode transit time table having internal demand nodes, terminal demand nodes and transit time by at least one of air, ground or sea. Lindell discloses the path from the point of origin to the

point of consumption of goods in a supply chain comprising several nodes, including wholesalers 3 delivering to distributors 4, which deliver products to other distributors 4 or shops 5 (figure 1 and column 3, lines 37-45), wherein the delivery is inherently by air, ground or sea.

Neither Adler nor Lindell disclose an inventory table, wherein the inventory table accepts delivery frequency, review period and service level for each terminal demand node and each internal demand node for automatically generating a realistic supply chain model.

Starr et al disclose an inventory table (i.e., product report 100, figure 5), wherein the inventory table accepts delivery frequency (i.e., run rate bar graph 106, wherein the processing rate may be determined over hours, days, weeks, or any other suitable time period, column 6, lines 56-63), review period (i.e., selected time horizon 101, figure 5), and service level (i.e., forecast allocated 102 associating each product identifier 110 with a percentage of forecasted demand allocated for production, column 6, lines 30-32) for each terminal demand node and each internal demand node (i.e., enterprise model 24 representing a supply chain in terms of its products, e.g., terminal demand node, and their component parts, e.g., internal demand nodes, column 3, lines 4-5) for automatically generating a realistic supply chain model (i.e., system 10 generates a visual display that presents information relating to a supply chain, column 2, lines 45-48).

Neither Adler, Lindell, nor Starr et al explicitly disclose the internode transit time table is configured to have statistical transit time data associated with transit time between nodes entered into the transit time table and wherein the transit time statistical data consists of mean and standard deviation values for the transit time, however statistical data consisting of mean and standard deviation values is old and well known in the mathematics and statistical arts.

Adler, Lindell and Starr et al are concerned with analyzing and modeling control of products in a supply network, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include an internode transit time table having internal demand nodes and terminal demand nodes and an inventory table in Adler, as seen in Lindell and Starr et al, respectively, thus allowing the network to be applicable to supply chains of arbitrary length and levels, as disclosed in Lindell (column 4, lines 15-17), and allowing the scenario planning process in Adler to simulate and evaluate proposed plans, as disclosed in Starr et al (column 3, lines 65-67) thus making the Adler system more robust and flexible.

As per claim 2, Adler does not disclose said nodes are classified as parts sources, internal demand nodes and terminal demand nodes. Lindell discloses the path from the point of origin to the point of consumption of goods in a supply chain comprising several nodes, including producers, wholesalers, and distributors (figure 1 and column 3, lines 37-42). Further, Lindell discloses a supplier means 31, connected to a customer means 32, connected to a

customer's customer means 33 (column 4, lines 3-7). Both Adler and Lindell are concerned with analyzing and modeling control of products in a supply network, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include nodes classified as parts sources, internal demand nodes and terminal demand nodes in Adler, as seen in Lindell, thus allowing the network to be applicable to supply chains of arbitrary length and levels, as disclosed in Lindell (column 4, lines 15-17), making the Adler system more robust and flexible.

As per claim 3, Adler discloses said objects flowing through the supply chain are classified as products, product forms and parts (i.e., non-autonomous objects, including products and services, ¶ 0073).

As per claim 4, Adler discloses said supply chain scenario is designed using an interactive symbolic visual interface (i.e., GUI enabling users to control and monitor the system, ¶ 0085).

As per claim 5, Adler discloses said interactive symbolic visual interface comprises interactive node icons and interactive connection element icons (i.e., pixel icon representing buyer, seller, trader in display window, table 9).

As per claim 6, Adler does not disclose said interactive node icons represent parts sources, internal demand nodes and terminal demand nodes. Lindell discloses the path from the point of origin to the point of consumption of goods in a supply chain comprising several nodes, including producers, wholesalers, and distributors (figure 1 and column 3, lines 37-42). Further, Lindell discloses

a supplier means 31, connected to a customer means 32, connected to a customer's customer means 33 (column 4, lines 3-7). Both Adler and Lindell are concerned with analyzing and modeling control of products in a supply network, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include nodes classified as parts sources, internal demand nodes and terminal demand nodes in Adler, as seen in Lindell, thus allowing the network to be applicable to supply chains of arbitrary length and levels, as disclosed in Lindell (column 4, lines 15-17), making the Adler system more robust and flexible.

As per claim 7, Adler discloses more than one supply chain (i.e., allowing businesses to adopt different roles with respect to trade items in different marketplaces, ¶ 0037).

As per claim 8, Adler discloses a method for performing alternative supply chain analysis (i.e., strategy model and analysis tool, including a spreadsheet application that apply predefined macros, ¶ 0033) comprising the steps of: b) classifying and naming objects flowing through said supply chain (i.e., modeling environment specifies the information in terms of object model, comprising object classes, ¶ 0082); c) building a supply chain model (i.e., modeling industrial markets in terms of businesses broken down into buyer, seller, and trade categories, ¶ 0077) wherein said supply chain model is automatically built to have desired capabilities (i.e., an integrated set of dedicated strategy modeling and analysis including loading the models and scenarios into an application engine that dynamically simulates the

behavior of the market, ¶ 0033); d) inputting data to said supply chain model to enable designing at least one supply chain scenario (i.e., sliders and windows that enable users to specify the domain, ¶ 0086 and plurality of scenarios 12, ¶ 0073), and e) using said supply chain model for said designing of said at least one supply chain scenario (i.e., plurality of scenarios 12, ¶ 0073).

Adler does not explicitly disclose classifying and naming nodes in a supply chain and building a supply chain model using said classifications and said names of said nodes and said objects. Lindell discloses the path from the point of origin to the point of consumption of goods in a supply chain comprising several nodes, including producers, wholesalers, and distributors (figure 1 and column 3, lines 37-42).

Neither Adler nor Lindell explicitly disclose f) a mean demand table configured to allow a user to enter mean and standard deviation values for a demand for each product, wherein the entered values correspond to a boundary condition for the supply chain analysis, and wherein an inventory table is used to accept delivery frequency, review period and service level for terminal demand nodes and internal demand nodes of the demand table for automatically generating a realistic supply chain model; g) a bill of materials table for parts, wherein a required number of parts for each product is entered by a user into the bill of materials table for translating the demand of the product into a parts demand; and h) a materials for product table configured to track product forms and intermediate assemblies of products, wherein a part transforms a product from one form to

another so that a part is associated with the product table that results from its incorporation.

Starr et al disclose f) a mean demand table configured to allow a user to enter mean and standard deviation values for a demand for each product, wherein the entered values correspond to a boundary condition for the supply chain analysis (i.e., constraints including demand and contractual demand fulfillment requirements, and order commitments, column 3, lines 43-50, wherein these constraints determine the boundary conditions) and wherein an inventory table (i.e., product report 100, figure 5) is used to accept delivery frequency (i.e., run rate bar graph 106, wherein the processing rate may be determined over hours, days, weeks, or any other suitable time period, column 6, lines 56-63), review period (i.e., selected time horizon 101, figure 5) and service level (i.e., forecast allocated 102 associating each product identifier 110 with a percentage of forecasted demand allocated for production, column 6, lines 30-32) for terminal demand nodes and internal demand nodes of the demand table (i.e., enterprise model 24 representing a supply chain in terms of its products, e.g., terminal demand node, and their component parts, e.g., internal demand nodes, column 3, lines 4-5) for automatically generating a realistic supply chain model (i.e., system 10 generates a visual display that presents information relating to a supply chain, column 2, lines 45-48); g) a bill of materials table for parts, wherein a required number of parts for each product is entered by a user into the bill of materials table for translating the demand of the product into a parts demand (i.e., enterprise model

24 that represents a supply chain in terms of its products and their components, column 3, lines 4-12, wherein interface 28 provides a user interface for inputting data affecting model 24, column 4, lines 5-7); and h) a materials for product table configured to track product forms and intermediate assemblies of products, wherein a part transforms a product from one form to another so that a part is associated with the product table that results from its incorporation (i.e., interface 28 used for viewing planning information generated by planning engine 26 and generating supply chain reports, column 4, lines 4-10). Neither Adler, Lindell, nor Starr et al explicitly disclose a standard deviation table, however standard deviation to a mean value is old and well known in the mathematics and statistics arts.

Adler, Lindell and Starr et al are concerned with analyzing and modeling control of products in a supply network, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include classifying and naming nodes and f) a mean demand table configured to allow a user to enter mean and standard deviation values for a demand for each product, wherein the entered values correspond to a boundary condition for the supply chain analysis, and wherein an inventory table is used to accept delivery frequency, review period and service level for terminal demand nodes and internal demand nodes of the demand table for automatically generating a realistic supply chain model g) a bill of materials table for parts, wherein a required number of parts for each product is entered by a user into the bill of materials table for translating the demand of the product into a parts demand;

and h) a materials for product table configured to track product forms and intermediate assemblies of products, wherein a part transforms a product from one form to another so that a part is associated with the product table that results from its incorporation in Adler, as seen in Lindell and Starr et al, respectively, thus allowing the network to be applicable to supply chains of arbitrary length and levels, as disclosed in Lindell (column 4, lines 15-17) and allowing the scenario planning process in Adler to simulate and evaluate proposed plans, as disclosed in Starr et al (column 3, lines 65-67) thus making the Adler system more robust and flexible.

As per claim 9, Adler does not disclose said nodes are classified as parts sources, internal demand nodes and terminal demand nodes. Lindell discloses the path from the point of origin to the point of consumption of goods in a supply chain comprising several nodes, including producers, wholesalers, and distributors (figure 1 and column 3, lines 37-42). Further, Lindell discloses a supplier means 31, connected to a customer means 32, connected to a customer's customer means 33 (column 4, lines 3-7). Both Adler and Lindell are concerned with analyzing and modeling control of products in a supply network, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include nodes classified as parts sources, internal demand nodes and terminal demand nodes in Adler, as seen in Lindell, thus allowing the network to be applicable to supply chains of

arbitrary length and levels, as disclosed in Lindell (column 4, lines 15-17), making the Adler system more robust and flexible.

As per claim 10, Adler discloses said objects flowing through the supply chain are classified as products, product forms and parts (i.e., non-autonomous objects, including products and services, ¶ 0073).

As per claim 11, Adler discloses said supply chain scenario is designed using an interactive symbolic visual interface (i.e., GUI enabling users to control and monitor the system, ¶ 0085).

As per claim 12, Adler discloses said interactive symbolic visual interface comprises interactive node icons and interactive connection element icons (i.e., pixel icon representing buyer, seller, trader in display window, table 9).

As per claim 13, Adler does not disclose said interactive node icons represent parts sources, internal demand nodes and terminal demand nodes. Lindell discloses the path from the point of origin to the point of consumption of goods in a supply chain comprising several nodes, including producers, wholesalers, and distributors (figure 1 and column 3, lines 37-42). Further, Lindell discloses a supplier means 31, connected to a customer means 32, connected to a customer's customer means 33 (column 4, lines 3-7). Both Adler and Lindell are concerned with analyzing and modeling control of products in a supply network, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include nodes classified as parts sources, internal demand nodes and terminal demand nodes in Adler, as seen

in Lindell, thus allowing the network to be applicable to supply chains of arbitrary length and levels, as disclosed in Lindell (column 4, lines 15-17), making the Adler system more robust and flexible.

As per claim 14, Adler discloses the scenario properties are altered using a visual display-pointing device in association with the icons (i.e., GUI is used to select the domain model, scenario and decision option to be loaded into the system, ¶ 0092).

As per claim 15, Adler discloses performing alternative supply chain analysis (i.e., strategy model and analysis tool, including a spreadsheet application that apply predefined macros, ¶ 0033) comprising: b) classifying and naming objects flowing through said supply chain (i.e., modeling environment specifies the information in terms of object model, comprising object classes, ¶ 0082); c) building a supply chain model (i.e., modeling industrial markets in terms of businesses broken down into buyer, seller, and trade categories, ¶ 0077) wherein said supply chain model is automatically built to have desired capabilities (i.e., an integrated set of dedicated strategy modeling and analysis including loading the models and scenarios into an application engine that dynamically simulates the behavior of the market, ¶ 0033); d) inputting data to said supply chain model to enable designing at least one supply chain scenario (i.e., sliders and windows that enable users to specify the domain, ¶ 0086 and plurality of scenarios 12, ¶ 0073), and e) using said supply chain model for said designing of said at least one supply chain scenario (i.e., plurality of scenarios 12, ¶ 0073).

Adler does not explicitly disclose classifying and naming nodes in a supply chain and building a supply chain model using said classifications and said names of said nodes and said objects, and classifying an internode transit time table having internal demand nodes and terminal demand nodes by at least one of air, ground or sea. Lindell discloses the path from the point of origin to the point of consumption of goods in a supply chain comprising several nodes, including producers, wholesalers, and distributors (figure 1 and column 3, lines 37-42), wherein the delivery is inherently by air, ground or sea. Moreover, Lindell discloses the path from the point of origin to the point of consumption of goods in a supply chain comprising several nodes, including wholesalers 3 delivering to distributors 4, which deliver products to other distributors 4 or shops 5 (figure 1 and column 3, lines 37-45).

Neither Adler nor Lindell disclose h) accepting delivery frequency, review period and service level by an inventory table for terminal demand nodes and internal demand nodes of the internal demand nodes for automatically generating a realistic supply chain model.

Starr et al disclose an inventory table (i.e., product report 100, figure 5), wherein the inventory table accepts delivery frequency (i.e., run rate bar graph 106, wherein the processing rate may be determined over hours, days, weeks, or any other suitable time period, column 6, lines 56-63), review period (i.e., selected time horizon 101, figure 5), and service level (i.e., forecast allocated 102 associating each product identifier 110 with a percentage of forecasted

demand allocated for production, column 6, lines 30-32) for each terminal demand node and each internal demand node (i.e., enterprise model 24 representing a supply chain in terms of its products, e.g., terminal demand node, and their component parts, e.g., internal demand nodes, column 3, lines 4-5) for automatically generating a realistic supply chain model (i.e., system 10 generates a visual display that presents information relating to a supply chain, column 2, lines 45-48).

Neither Adler, Lindell, nor Starr et al explicitly disclose g) entering into the internode transit time table statistical transit time data consisting of mean and standard deviation values associated with transit times between nodes, however statistical data consisting of mean and standard deviation values is old and well known in the mathematics and statistical arts.

Adler, Lindell and Starr et al are concerned with analyzing and modeling control of products in a supply network, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include an internode transit time table having internal demand nodes and terminal demand nodes and an inventory table in Adler, as seen in Lindell and Starr et al, respectively, thus allowing the network to be applicable to supply chains of arbitrary length and levels, as disclosed in Lindell (column 4, lines 15-17), and allowing the scenario planning process in Adler to simulate and evaluate proposed plans, as disclosed in Starr et al (column 3, lines 65-67) thus making the Adler system more robust and flexible.

Claims 16-20 are rejected based upon the same rationale as the rejection of claims 2-6, respectively, since they are the computer readable medium claims corresponding to the system claims.

Response to Arguments

7. In the Remarks, Applicant argues that the combined references are missing the newly amended claimed inventory table that accepts delivery frequency, review period and service level for each terminal demand node and each internal demand node for automatically generating a realistic supply chain model. The Examiner respectfully disagrees and submits that Starr et al disclose an inventory table (i.e., product report 100, figure 5), wherein the inventory table accepts delivery frequency (i.e., run rate bar graph 106, wherein the processing rate may be determined over hours, days, weeks, or any other suitable time period, column 6, lines 56-63), review period (i.e., selected time horizon 101, figure 5), and service level (i.e., forecast allocated 102 associating each product identifier 110 with a percentage of forecasted demand allocated for production, column 6, lines 30-32) for each terminal demand node and each internal demand node (i.e., enterprise model 24 representing a supply chain in terms of its products, e.g., terminal demand node, and their component parts, e.g., internal demand nodes, column 3, lines 4-5) for automatically generating a realistic supply chain model (i.e., system 10 generates a visual display that presents information relating to a supply chain, column 2, lines 45-48).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (571)272-6726. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andre Boyce/
Patent Examiner, Art Unit 3623
March 7, 2008